

CLAIM AMENDMENTS

Claim 1 (currently amended):

A miter saw comprising:

a base adapted to support a workpiece during cutting;

a fence on the base;

a motor;

a rotatable, circular blade driven by the motor, where the blade includes teeth around its periphery;

a pivot arm assembly associated with the base and supporting the blade, where the pivot arm assembly is adapted to pivot toward and away from the base to move the blade toward and away from the base; and

a safety system having a detection subsystem adapted to detect the occurrence of an unsafe condition between a person and the blade, and a reaction subsystem adapted to mitigate the unsafe condition, where the reaction subsystem includes a brake mechanism positioned adjacent the blade and adapted to pivot into the teeth of the blade to engage the blade and ~~further adapted to maintain its position adjacent the blade when the blade moves toward or away from the base.~~

Claims 2-10 (cancelled).

Claim 11 (new):

A miter saw comprising:

a base adapted to support a workpiece during cutting;

a fence on the base;

a motor;

a rotatable, circular blade driven by the motor, where the blade includes teeth around its periphery;

a pivot arm assembly associated with the base and supporting the blade, where the pivot arm assembly is adapted to pivot toward and away from the base to move the blade toward and away from the base; and

a safety system having a detection subsystem adapted to detect the occurrence of an unsafe condition between a person and the blade, and a reaction subsystem adapted to mitigate the unsafe condition, where the reaction subsystem includes brake means for pivoting into the teeth of the blade to stop the rotation of the blade if an unsafe condition is detected by the detection subsystem.

Claim 12 (new):

The miter saw of claim 11 where the brake means is supported by support arm means for holding the brake means adjacent the teeth of the blade.

Claim 13 (new):

A miter saw comprising:

a base adapted to support a workpiece during cutting;

a fence on the base;

a motor;

a rotatable, circular, generally planar blade driven by the motor, where the blade includes teeth around its periphery;

a pivot arm assembly associated with the base and supporting the blade, where the pivot arm assembly is adapted to pivot toward and away from the base to move the blade toward and away from the base; and

a safety system having a detection subsystem adapted to detect the occurrence of an unsafe condition between a person and the blade, and a reaction subsystem adapted to mitigate the unsafe condition, where the reaction subsystem includes a brake configured to pivot into the teeth of the blade around an axis generally perpendicular to the plane of the blade.